

A pair of Gloster Gauntlet single-seaters over the ranges at No. 3 Armament Training Station, Sutton Bridge.

national sailing dinghies, instruction on which is given by the C.O. himself. In Singapore the Group Captain was the moving spirit in a sailing club with about sixty craft.

From Felixstowe we went to near-by Martlesham, where the Aeroplane and Armament Experimental Establishment is commanded by Group Captain H. G. Smart, O.B.E., D.F.C., A.F.C. This Establishment, apart from testing new landplane designs, is responsible for a large amount of experimental work with guns, bombs, sights, etc. Space does not permit a detailed study of the organisation of the Establishment (this was, in fact, dealt with last year), so we will confine ourselves to a few impressions.

It was, to say the least, shattering to find, on arrival, that flying activity was limited, apparently, to a Vickers Virginia and a Valentia. As a matter of fact, these stately old retainers are used as "hacks"; a good deal of flying equipment of much more modern vintage was, we found on investigation, distributed around and inside the hangars. Actual prototypes on test normally represent but a small proportion of the aircraft flying at Martlesham, the majority of machines, like the big Vickers, being used for experiments with equipment or armament. There were assorted Hawkers, including Nash and Thompson-turreted Demons; a new Hispano-engined Fairey Fantome used for experiments with the 20 mm. shell-gun between the cylinder blocks; a training curio in the form of a two-bay Avro Tutor; the Bombay, Hampden, Skua, Don, Oxford, Mentor, Hurricane, Harrow and Whitley IV with Merlins.

The Skua dive bomber fleet fighter was going up for diving tests, but regulations decree that ballast shall be used instead of an air gunner. We were consoled, however, with a trip in the De Havilland Don advanced trainer and communications machine, which has dual control and is powered with a Gipsyking inverted vee-twelve air-cooled engine. The pilot was Sqn. Ldr. J. F. X. McKenna, of the Performance Testing Section, who willingly fell in with our suggestion that, after the machine had been posed for photographs, we should, in his own words, "get a few G on."

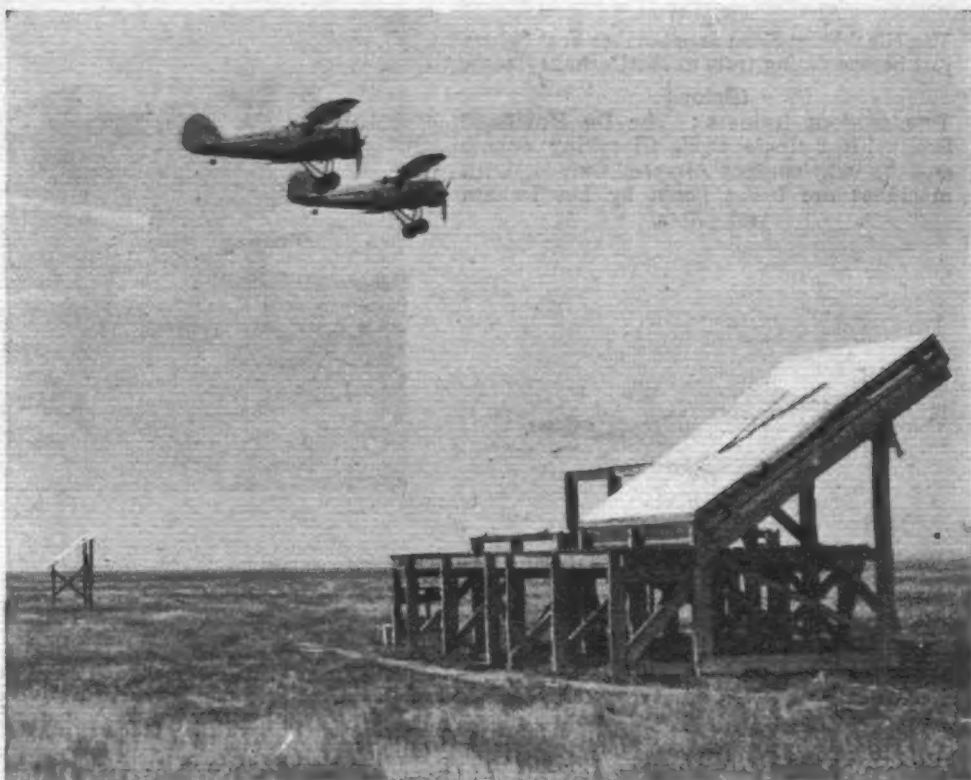
Almost a Black-out

For the uninitiated let us explain that "G" represents "gravity" and is used for the measurement of acceleration in tight turns and pull-outs from dives. When sufficiently high it causes a "black-out," or a momentary state of unconsciousness due to the draining of blood from the head.

Our introduction to the higher values of "G" took the form of a sharp pull-out from a dive with the A.S.I. showing 250-odd m.p.h. No luck; we stayed mentally "put." Then a tight loop and some even tighter turns, but never a complete black-out although at times things *did* seem rather grey and far away and the Life Stream was obviously ebbing. But it was a grand ride and gave one tremendous confidence in the Don.

Armament training is given at a number of stations round the coast; our choice was Sutton Bridge where No. 3 A.T.S. is commanded by Wing Cdr. F. O. Soden, D.F.C., who quite apart from his good work in the Service, is a tremendously keen private pilot. Briefly, the work of the station is to tow drogue targets with its Wallaces for the benefit of visiting squadrons and to maintain ground targets on the near-by marshes and a bombing target at the water's edge.

Two squadrons at a time go to Sutton Bridge for a



three or four weeks' stay and the two towing flights are kept hard at it.

A hit on the front of a drogue, by the way, counts three points; on the rear portion the score is only one.

As both the visiting squadrons were equipped with Gauntlets the C.O. was good enough to arrange for initiation into the secrets of attacking a drogue. A Sergeant Pilot was accordingly despatched with his target on a "local tow." Up and down the shore flew our quarry, like a docile old hound who permits people to pull his tail for amusement. Not that the Wallace is by any means decrepit, as we found when our pilot began to stand our machine on its nose a thousand or fifteen hundred feet above the target. The timing was superb; at the bottom of each dive the drogue came fluttering out from under our nose in somewhat alarming proximity. Again and again we pulled out and zoomed for an attack from a different quarter.

Stern attacks are made possible by a small auxiliary drogue which deflects the main drogue out of the line of flight of the towing aircraft. At night a searchlight on the range is used to illuminate the drogue.

At the School of Photography, Farnborough (Commanded by Wing Cdr. C. Porri), we looked in on a class to which the intricacies of Service cameras were being lucidly explained. The walls of the building which houses the School are adorned with choice mosaics (not in the archaeological sense) and other photographic gems which set the pupils a standard to work for.

South Cerney was selected as a typical Flying Training School; it is No. 3 and is commanded by Group Captain D. Iron, O.B.E.

Fifty pupils from the elementary schools are received a term, the averaged period being fifteen weeks. First they go to the Intermediate Training Squadron, which is equipped with Hart Trainers. The curriculum includes solo flying by day and night, elementary formation work, map reading, instrument flying, aerobatics, two long cross-country flights, height tests and instruction in armament, navigation, ground work, etc. At the end of the term, if all goes well, the pupil gets his wings.

Next he is passed to the Advanced Training Squadron for more exacting work on Furies (if he is earmarked for a fighter squadron) and Audaxes. Each term at the A.T.S. culminates with a spell of armament training; after that the pupil is ready for posting.

Great benefits are being derived from the new Link trainers now issued to F.T.S.'s.

We left South Cerney convinced that the training of R.A.F. pilots is in the very best of hands. On our visits to squadrons we saw how amply repaid are their efforts.